K.05
7/16/87

Sverdrup
CORPORATION
801 North Eleventh
St. Louis, Missouri 63101
314 436-7600

153560

DAILY
FIELD
REPORT

DATE: July 16, 1987
TIME: 0530-1830
PLACE: Cerro Copper Plant Site
Sauget, IL
WEATHER: Sunny, 80s

PROJECT: JOB 10224A
CERRO COPPER
IEPA RI/FS OVERSIGHT

DISTRIBUTION:
S. Silverstein, Cerro (3 copies)
JBC/LJO/ED 10224A-1.3

PERSONNEL ON SITE:

Name	Affiliation	Hours
Larry Oliver	Sverdrup	3
Dan Sewall	Ecology & Environment (E&E)	13
Bridget Haugh	Ecology & Environment (E&E)	13
Tim Maley	Ecology & Environment (E&E)	13

FIELD WORK SUMMARY:

1. Larry Oliver arrived at the E&E Metro Field Office at 0715 to observe the equipment and procedures employed by E&E for a two-day air-monitoring study on and around the Cerro property south of New Queeny Avenue, related to the IEPA RI/FS. Dan Sewall, Tim Maley, and Bridget Haugh had already placed, started, and calibrated six (6) "high volume" samplers and were in the process of setting up "low volume" samplers at each of the "high volume" samplers. The locations of the samplers are showned in Attachment A.

2. The "high volume" samplers are products of General Metal Works Incorporated a Subsidiary of Anderson Samplers Incorporated. The samplers have a vaccum pump that draws sample through a glass fiber filter and a fluorosell filter, both of which are located near the top of the samplers. The exhaust air discharges through a flexible pipe from the bottom of the samplers. The field report photos show the characteristics and arrangements of these samplers.

   The following points are relavent to understanding the purpose and function of the "high volume" samplers:

   - The samplers are electrically operated and in this application E&E employed portable electric generators to provide the necessary power.

C284-3

- o The samplers were setup to collect continuous samplers over a 12-hour period.

- o The sampler flow rate was set at approximately 28 liters/ minute.

- o The materials collected by the glass fiber filter will be analyzed for particulate, polychlorinated biphenols (PCBs), and toxic metals.

- o The materials collected by the fluorosell filter will be analyzed for PCBs, pesticides, and semi-volatiles.

3. The "low volume" samplers are Gilian Model HFS113A Hi Flow Air Samplers which are products of the Gilian Instrument Corporation. They are small battery-operated units designed for collecting continuous samples by drawing air through absorbent media contained in small glass tubes. For this application, two types of tubes were used. One tube contained polyurethane foam media and the other contained charcoal media. The field report photos show the characteristics and arrangement of these samplers.

   The following points are relavent to understanding the purpose and function of the "low volume" samplers:

   - o The samplers were setup to collect continuous samples over an eight hour period.

   - o The air flow rate through the tubes can be adjusted by means of small valves on a control header. A calibration meter is used to set the flow rate desired.

   - o The flow rate through the polyurethane foam media was set at one liter/minute. The materials collected by the foam will be analyzed for semi-volatiles.

   - o The flow rate through the charcoal media was set at 500 milliliters/minute. The materials collected by the charcoal will be analyzed for volatile organics.

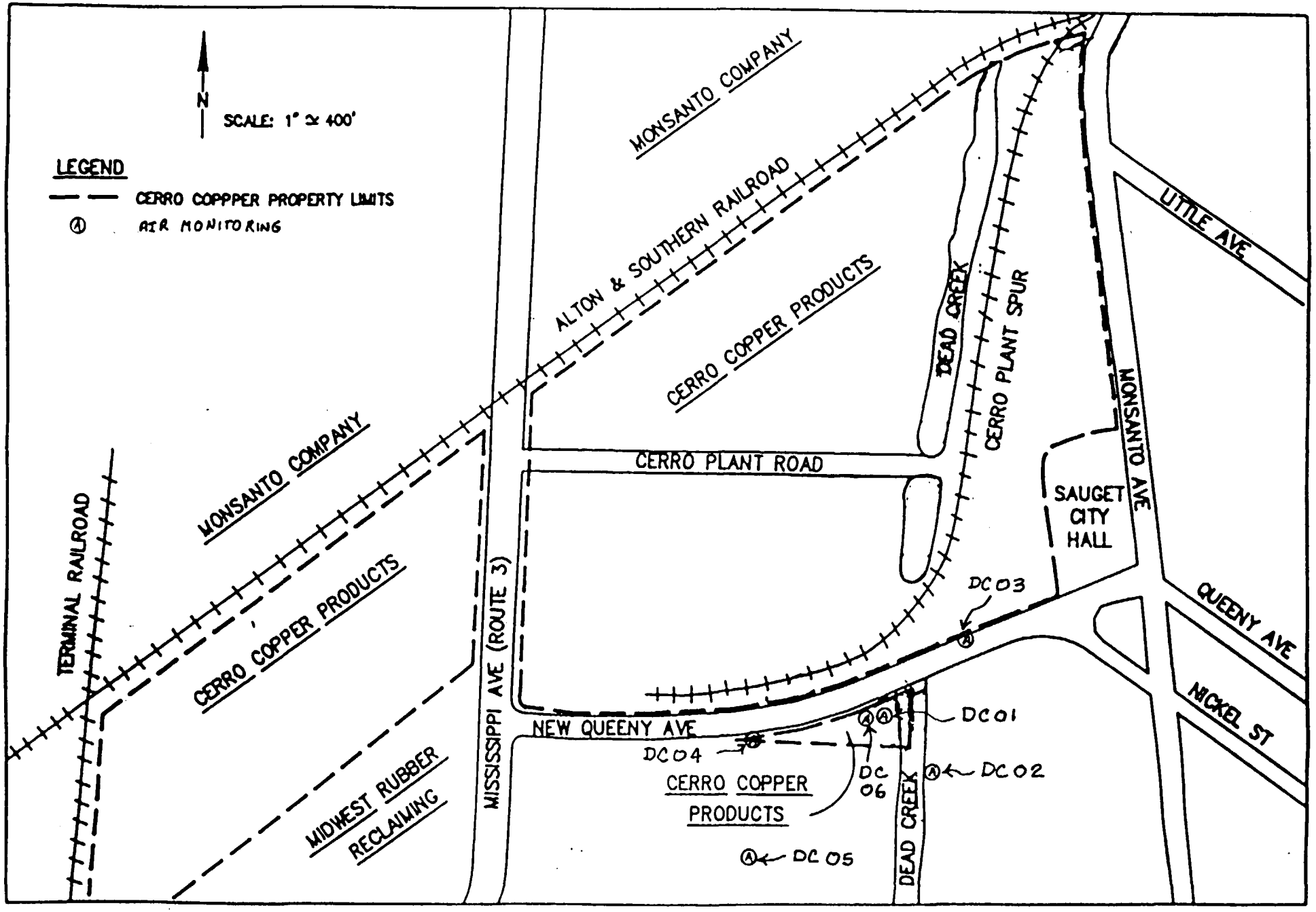
4. Once all the samplers were positioned and calibrated, the E&E crew monitoried the activities at each location to verify that all units were operations properly. They plan routine monitoring throughout the 12-hour sampling period. A second day of sampling is scheduled for tomorrow.

5. Larry Oliver took eight pictures of the samplers and the work performed by E&E.

6. Larry Oliver departed the site at 0930.

Attachment

Larry J. Oliver
Sverdrup Corporation



SITE MAP AND E & E WORK AREAS

ATTACHMENT A